#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/24/98 Date Received: 07/09/98

Project: Metro Self Monitor, PO# M11653

Date Samples Extracted: 07/22/98 Date Extracts Analyzed: 07/22/98

### RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

# Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		Chromium	Copper	Nickel	Zinc
M11653		0.22	0.22	0.31	<0.05
Method Blanl	k 🐪	< 0.05	< 0.05	< 0.05	< 0.05

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/24/98 Date Received: 07/09/98

Project: Metro Self Monitor, PO# M11653

### QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 807038-01 (Duplicate)

				Relative		
	Reporting	Sample	Duplicate	e Percent	Acceptance	e e
Analyte	Units	Result	Result	Difference	Criteria	
Chromium	mg/L (ppm)	0.22	0.34	43a	0-20	
Copper	mg/L (ppm)	0.22	0.24	9	0-20	
Nickel	mg/L (ppm)	0.31	0.32	3	0-20	
Zinc	mg/L (ppm)	< 0.05	0.06	nm	0-20	

Laboratory Code: 807038-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	e
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.22	95	97	80-120	2
Copper	mg/L (ppm)	5	0.22	107	111	80-120	4
Nickel	mg/L (ppm)	10	0.31	98	99	80-120	1
Zinc	mg/L (ppm)	5	< 0.05	102	103	80-120	1

Laboratory Code: Laboratory Control Sample

		Reporting	Spike	% Recovery	% Recove	ry Acceptanc	e dada da karanta ka
	Analyte	Units	Level	LCS	LCSD	Criteria	RPD
ĸ.	Chromium	mg/L (ppm)	5	99	100	80-120	444, 91 A, 95
	Copper	mg/L (ppm)	5	111	112	80-120	
1	Nickel	mg/L (ppm)	10	105	106	80-120	1
	Zinc	mg/L (ppm)	5	108	108	80-120	0

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC. 3012 15th Avenue West Seattle, WA 98119-2029 (206) 285-8282

- FORMS/COC

507035 COV HILL

Send Report To: ///	ï	7)						· ·	-
Company / 1,1	SEG-	3 (20)	on Work	<u>'S</u>	Cont	act 🗁	excl	TLX	-112
Address / CS / City, State, Zip. Second	1/20-00	103	- J						
Phone # (206) 32	13-22	38		(2.26)	368-8709				
		<del> </del>	TAA #		302-1501	<del></del> -	Dule_	<u> 7- y</u> -	9.5
SITE NO.	· ——		PRO	JECT NAM	Е	-	PURG	CHASE ORE	DER#
72.38			metro	Suf	282 dan	1	22/16	. 7%</td <td></td>	
SAMPLERS (Signature)						1		LOT LOCA	The S
5/1/5/3			a Marija da Alika Marija			- <;		(-1)	
REMARKS			Committee of the Commit			<u>کستر، ا</u>	(20)	( - 1	4ce 3
								SPOSAL INF Se after 30 c	
							Return	se after 30 t Samples or Instructio	
Sample #		de/Time	Type of	# of	Lab	L		Analys	
M11680	1	ampled	Sample	Jurs Jurs	Sample	#		Reques	ted
PP 1/16:03	177	13 14:70	1-120		CI		CK.	Ca 2	,U, Z-
	ļ								
and the second section of the section of	ļ	· · · · · · · · · · · · · · · · · · ·							
		The continues of the continues the continues the property of the continues the continu						**	
					·		*****		<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
		The second of th					***************************************		ety della manus un dagen gan
The second secon					<del> </del>			*******************************	
And the state of t	<u> </u>							***************************************	
And the second s									
Andrew Control of the	İ			-				and control make comment of the	ng - Militaria a a sa s
and the state of t									
The state of the s		- who should never to the proper property than the second	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-						
								•	
							<del></del>	······	
				1					
eignayure		Pl	UNT NAME	1	COMPAN	Y		Date	Time
elipshed by:	34	Q., 11	577	]	Λ			/ 1	
ecolyed by:		Villor G	1 000- PSO		ACI	٠.		75/50	16,5
I'M KAGA	<u> </u>	Oliver	Heydlow	F	2B/40		17/	9/9/	170
elinquished by:	9		7	P 1	7 - 11/1		1/	<del>'/-'-()</del>	1
éceived by:									1

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 24, 1998

### **DUPLICATE COPY**

### **INVOICE #98ACU0724-1**

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M11653: Results of testing requested by Gerry Thompson for material submitted on July 9, 1998.

FEDERAL TAX ID (b) (6)

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 24, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 9, 1998 from your Metro Self Monitor, PO# M11653 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0724R.DOC